UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/505,475	08/24/2004	Guido Mayer	3165-105 1724		
6449 ROTHWELL	7590 11/29/2007 FIGG, ERNST & MAN		EXAM	IINER	
1425 K STRE		OH, TAYLOR V			
SUITE 800 WASHINGTON, DC 20005			ART UNIT	PAPER NUMBER	
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			NOTIFICATION DATE	DELIVERY MODE	
			11/29/2007	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

•	· ·	Applicatio	n No.	Applicant(s)		
		10/505,47	5	MAYER ET AL.		
•	Office Action Summary	Examiner		Art Unit		
		Taylor Vict		1625		
Period fo	The MAILING DATE of this communication app or Reply	oears on the	cover sheet with the co	orrespondence address		
A SH WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANS of time may be available under the provisions of 37 CFR 1.11 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period vere to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF TH 36(a). In no eve will apply and will b. cause the appli	IS COMMUNICATION nt, however, may a reply be tim expire SIX (6) MONTHS from to cation to become ABANDONED	I. lely filed the mailing date of this communication. O (35 U.S.C. § 133).		
Status						
2a)⊠	Responsive to communication(s) filed on 10 Second This action is FINAL. 2b) This Since this application is in condition for alloware closed in accordance with the practice under Exercise 10 Second This Second This is a second This second This is a second This i	s action is no nce except t	on-final. for formal matters, pro			
Disposit	ion of Claims					
5)□ 6)⊠ 7)□	Claim(s) <u>6 and 8-31</u> is/are pending in the appli 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) <u>6 and 8-31</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/o	wn from cor				
Applicat	ion Papers					
10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) acc. Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine	epted or b)[drawing(s) b tion is require	e held in abeyance. See ed if the drawing(s) is obj	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).		
Priority (under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
2) Notice 3) Information	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date		4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate		

Final Rejection

The Status of Claims:

Claims 6, and 8-31 are pending.

Claims 6 and 8-31 have been rejected..

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The rejection of Claims 6, 17-18, 21, and 28-31 under 35 U.S.C. 102(b) as being anticipated clearly by Oberdorf et al (US 6,114,342) has been withdrawn due to applicants' convincing argument.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The rejection of Claims 6, and 8-31 under 35 U.S.C. 102(b) as being anticipated clearly by Oberdorf et al (US 6,114,342) in view of Jempty et al (J. Org. Chem . 1981, 46. 4545-4551) and Moody et al (Synlett 1999, no. 10, 1575-76).

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Applicants' Arguments

Applicants argue in the followings:

- 1. the Jempty prior art discloses that the silica supported iron chloride is used in a 1.1 molar ration ,whereas the claimed catalyst uses an amount of from 0.001 to 0.5 mol equivalents;
- 2. the present claims do not require the ether cleaving event to be dependent first upon nitro group reduction because a nitro group is not included in the claimed starting compounds unlike the prior process:

Art Unit: 1625

3. Moody discloses that "benzyl ethers remained intact, demonstrating the selectivity of the reaction, "unlike the claimed invention which requires a benzyl ether to be cleaved; thus, it is not applicable to the current invention.

Applicants' arguments have been noted, but the arguments are not persuasive.

First, regarding the first argument, the Examiner has noted applicants' arguments. However, the difference about the usage of the amount of the catalyst does not carry much of the patentable weight over the prior art since the limitation of a process with respect to ranges of pH, time ,temperature, speed ,and amount does not impart patentability to a process when such values are those which would be determined by one of ordinary skill in the art in achieving optimum operation of the process. The catalytic amount in the process is well understood by those of ordinary skill in the art to be a result-effective variable, especially when attempting to control selectivity and the operational cost of the process. Therefore, it would have been obvious to the skilled artisan in the art to be motivated to adjust the amount of the catalyst in the Jempty prior art by routine experimentation in order to optimize the reaction process. Therefore, applicants 'argument is not persuasive.

Second, regarding the second argument, the Examiner has noted applicants' arguments. However, on the contrary to applicants 'arguments, the claimed starting compounds do have the nitro group present in claimed compounds (II) of claim 1 in

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which one of the variable R is nitro; therefore, there is no difference between the starting prior art compounds and the claimed compound ones. Therefore, applicants' argument is not persuasive.

Third, regarding the third argument, the Examiner has noted applicants' arguments. However, Moody et al. expressly discloses that the use of indium in aqueous ethanolic ammonium chloride is an effective method for deprotection of 4 – nitrobenzyl ethers and esters (see page 1575, table 1 and following paragraph) as shown below:

Table 1 Deprotection of 4-nitrobenzyl ethers and esters

I	R	Yield/%
B	PhCH2CH2	87
b	PhOCH ₂ CH ₂	98
c	PhCH2OCH2CH2	100
ď	(1R,2S,5R)-2-isopropyl-5-methylcyclohexyl	93
e	4-McO-C6H4	81
f	4-Ac-C ₆ H ₄	97
g	3-OHC-C6H4	61
h	2,3,5-Me ₃ -C ₆ H ₂	100
i	2,4,5-Cl ₃ -C ₆ H ₂	90
j	6-quinolinyl	97
k	4-CI-C6H4-CO	90
1	(±)-CbzNIICHMeCO	9 6

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> All substrates were cleaved in good yield, and benzyl carbamates and benzyl ethers remained intact, demonstrating the selectivity of the reaction. Other functional groups

From the above table and these passages, it becomes clear that the Moody has tried to show that the cleavage of the benzylic C-O bond in the main portion of 4-nitrobenzyl ether compound does take place without cleaving its side chain group (R) which contains benzyl ethers groups. Thus, the prior art still reads on the claimed invention. Therefore, applicants 'argument is not persuasive.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Dispositi	on of Claims						
5)□ 6)⊠ 7)□	4) Claim(s) 6 and 8-31 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 6 and 8-31 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.						
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11)	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex						
Priority L	ınder 35 U.S.C. § 119						
12)⊠	Acknowledgment is made of a claim for foreign ☐ All b)☐ Some * c)☐ None of: 1.☐ Certified copies of the priority document			-(d) or (f).			
	2. Certified copies of the priority document			on No	*		
	$3. \boxtimes$ Copies of the certified copies of the prior	ority document	s have been receive	d in this National S	Stage		
	application from the International Burea	•					
* 5	See the attached detailed Office action for a list	t of the certifie	d copies not receive	d.			
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	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4)	Interview Summary (Paper No(s)/Mail Da	te			
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k	4-CI-C ₆ H ₄ -CO	90
1	(±)-CbzNIICHMeCO	96

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taylor Victor Oh whose telephone number is 571-272-0689. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571-272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TAYLOR VICTOR OH PRIMARY EXAMINER

11/25/17



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. Sex 1459 Alexandra, Waginis 22113-1459

Bib Data Sheet

CONFIRMATION NO. 1724

	SERIAL NUMBER 10/505,475	FILING OR 371(c) DATE 08/24/2004 RULE	(CLASS 560	GRO	UP AR 1625	r unit	-	ATTORNEY OCKET NO. 3165-105	
	APPLICANTS									
ري	Guido Mayer, Gonnheim, GERMANY; Oliver Cullmann, Heppenheim, GERMANY; Bernd Wolf, Fussgonheim, GERMANY; Michael Keil, Freinsheim, GERMANY;									
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